

though the affection is usually more severe in the part where it commenced. As occurring in writers, it may be more accurately described as affecting the muscles of the thumb. In a case mentioned to us by Mr. Holmes Coote, the disease consisted, not so much in spasmodic contraction of the flexor muscles, as in a sudden temporary paralysis of the extensor muscles of the thumb, for the digit did not convulsively close in the palm of the hand, but simply slipped away from the pen, after being applied to it for a few moments, evidently from loss of power in the opposing force to the flexor muscles. The disease in this case extended from the right to the left hand, where, however, it never attained the severity manifested in the part first affected. The only mechanical contrivance which afforded even partial relief was an apparatus consisting of a circular holder attached to two rings, which fitted on to the fore and middle fingers, and held the pen suspended independent of the thumb. But after a time the extensor muscles of the fingers became weak, and the patient was obliged to acquire the habit of writing with the left hand. It is worthy of remark, that every other movement of the hand, however minute, save that of writing, was retained perfectly by this patient.—*Med. Times and Gaz.* Sept. 10, 1853.

29. *Statistical Report of Fatal Cases of Diseases of the Brain occurring during the last Four Years at St. George's Hospital.* By A. W. BARCLAY, Medical Registrar. (*Proceedings of the Royal Medical and Chirurgical Society*, June 28, 1853.)—The author was induced to present to the Society this statistical report from a conviction that our knowledge of the relation between the symptoms and pathological states of the brain was as yet very imperfect; and he believed that greater certainty in the diagnosis could only be accomplished by an accumulation of facts, and by arranging these in the present form he was led to hope that some useful and authentic information might be obtained. The report was wholly confined to cases in which, by *post-mortem* examination, the nature of the lesion was ascertained; for his object was to deal with facts, and not with theories; and for the same reason no reference was made to the proportion of cases admitted into the hospital, nor to the relative proportion of deaths and recoveries among persons supposed to be labouring under similar diseases. It was hardly necessary to add, that diseases of the brain yielded an invariably high ratio of mortality. The cases were divided into scrofulous inflammation, with or without actual presence of tubercles in the brain; simple inflammation; abscess; softening of a non-inflammatory nature; delirium tremens; apoplexy; and tumours. The author proceeded to offer some observations on the cases included in these several divisions.

1. *Scrofulous Inflammation.*—These cases were twenty-eight in number, and the age at which such cases proved fatal contrasted remarkably with other diseases of the brain. There were nine under fifteen years of age; five from fifteen to twenty; seven from twenty to twenty-five; four from twenty-five to thirty; two from thirty to forty; one from forty to fifty; one over fifty years of age. No facts were recorded in the majority of the cases which threw any light upon the usual exciting cause of scrofulous inflammation of the brain. The symptoms were sometimes slowly and insidiously developed, at other times setting in with unexpected violence; while no point in the history of the case could be learned in any way accounting for their origin. And this had not unfrequently been the case when the patient was under observation at the commencement of the disorder. In nineteen of the twenty-eight cases, scrofulous or miliary tubercles were found in the brain or its envelopes, the proportion of yellow, cheesy, or scrofulous tubercle being far greater than those of the miliary kind. The mode of incursion of this form of brain disease was very various; but those in which it was most difficult to recognize were the cases commencing with symptoms resembling ordinary continued fever. In three instances, there had been previous attacks referable to the nervous centres; in another instance, the symptoms were developed soon after a fall; in one, after exposure to the sun; in the remainder, there was no satisfactory history. In eleven cases, pain in the head was the earliest symptom; in six, delirium was the first prominent symptom; in two, convulsions commenced as the first evidence of mischief. In eleven out of twenty-eight cases, pain of the head was not complained of; delirium was

absent in eight cases of this class. Convulsions may be said to be the rule, and their absence the exception in childhood. Among the twenty-eight cases, there was no exception to this under the age of thirteen. The period at which delirium commenced, convulsions, paralysis, partial or general strabismus, were also carefully noted and recorded. The *post-mortem* condition of the cerebral mass, as well as of the membranes and vessels accompanying the scrofulous deposit, were next compared.

2. *Simple Inflammation and Congestion.*—The ages of these patients formed a striking contrast to those of the preceding class. Here the earliest period of fatal inflammation was sixteen years, and only three were reported under the twenty-seventh year, the period at which all but five of the scrofulous cases had terminated. Classed in periods of ten years, there were three cases from fifteen to twenty-five, eight from twenty-five to thirty-five, four from thirty-five to forty-five, three over forty-five years of age; the oldest occurring at the age of fifty-seven. Of the eighteen cases, only four were of the female sex. The mode of incursion in cases of simple inflammation was less insidious, and more commonly traceable to a distinct exciting cause, than in the preceding class, and there were only three instances recorded in which the history of the case and the character of the symptoms rendered the diagnosis of acute disease in the brain by any means doubtful. The special symptoms characteristic of cerebral lesion, pain of the head, delirium, convulsions, and paralysis, were noticed in relation to their frequency and the period of their occurrence. Of the *post-mortem* appearances, lymph or turbid serum was found in nine cases upon or under the arachnoid; in fourteen cases, fluid was found in the ventricles. The brain was soft in four cases, two with increased vascularity, and two with a watery state of the brain. It was congested in eleven cases, and wet and pale in three. Then followed a contrast between the symptoms in the scrofulous and the non-scrofulous class.

3. *Abscess of the Brain.*—Five examples were recorded of this form of disease. The history of these cases was somewhat obscure, and the causes which determined this action in the cerebral lobes, and the period at which suppuration actually commenced, were uncertain. Four of the cases were encysted; one was simple abscess, two were associated with caries of the temporal bone, one with suppuration on both sides of the cranium opposite to a sloughing wound of the integuments.

4. *Softening of a non-inflammatory kind.*—Only one instance of this form of lesion was recorded; its duration was five months; its progress was chiefly marked by the existence of hemiplegia, with indistinct articulation; the whole of the medullary substance on the left side was softened and diffuent; the brain appeared congested.

5. *Delirium Tremens.*—Ten fatal cases of this disorder were recorded. They were all of the male sex. The ages varied from twenty-nine to fifty-four. Various diseased states of other organs were noted, which probably exercised an influence, more or less decided, in causing the cases to terminate fatally. The heart was diseased in seven cases; the liver in six; the kidney in two. In four cases, tubercles were found in the lungs; once recent; five times in the form of a cretaceous mass. The membranes of the brain were congested in four cases; an excess of fluid was found under the arachnoid in eight cases. In six cases, the ventricles contained an excess of fluid. The substance of the brain was in the majority of cases "wet."

6. *Apoplexy.*—There were fourteen cases of this disease: nine males; five females. Seven cases from forty to fifty years of age; three from fifty to sixty; three from sixty to seventy; one over seventy years. Atheroma of the arteries at the base of the brain existed in seven cases; healthy in five. The heart was distinctly hypertrophied in seven cases; in all of these cases the kidneys were also diseased. The anatomical conditions in the brain were various: in one case, an old apoplectic clot under the arachnoid; in another case, turbid serum under this membrane; there was effusion of blood in this case, limited to two small clots in the third and fourth ventricles. In three cases, there was a good deal of blood effused at the surface, with large clots in the substance of the brain. In nine cases, the clots occupied a central position with reference to

the hemispheres. Distinct softening in the vicinity of the clot was found in five cases.

7. *Tumours*.—Of these were six cases: three males, three females; ages varied from twenty-four to forty-nine. Four were examples of encephaloid disease; two of encysted growths.

8. *Anomalous Cases*.—Two cases could not be referred to either of the preceding classes. There was no evidence of any anatomical lesion in the cerebral structures; while the symptoms during life were distinctly characteristic of brain disease. In one, the kidneys were in a state of degeneration, but the author doubted if albuminuria ever produced paralysis of one side of the face and strabismus, which preceded the stupor and coma, terminating fatally.

The author concluded by a general summary of the symptoms during life, in relation to the anatomical lesions recorded after death.

30. *Intermittent Diabetes, and the Diabetes of Old Age*. By H. B. JONES, Physician to the St. George's Hospital. (Proceedings of Royal Medical and Surgical Society.)—The author's object in this communication was to point out some phenomena connected with diabetes which he had not found mentioned by other writers. Preliminary to the record of the cases, the author offered some observations on the incorrect results obtained by calculating the amount of sugar present in the urine from the specific gravity. If diabetic urines were solutions of nothing but sugar in distilled water, the tables by Dr. Henry, and the amount of sugar calculated from the specific gravity, would give all the information required; but a multitude of other substances were present besides sugar, each of which was variable, and each of which might cause the specific gravity to vary, whilst the quantity of sugar might remain constant. To be accurate, therefore, the amount of sugar should always be determined by direct experiment, and never calculated from the specific gravity. Results were given, exhibiting the specific gravity, the amount of sugar calculated from solid apparatus, and the absolute amount of sugar obtained by direct analysis. On the subject of intermitting diabetes, the author observed that there could be little doubt that our knowledge of the nature of this disorder might be extended by means of accurate determination of the varieties in the amount of sugar in the urine passed at different periods of the day, and under different circumstances. His object in relation to this form of the disease was to record some cases in which, either from the medical treatment, or the regimen, or the natural course of the complaint, the variation in the amount of sugar was not from much to little, but from highly saccharine urine to total absence of sugar. The state of the urine a few hours after the sugar had disappeared, and an hour or two before it reappeared, was most especially worthy of attention, inasmuch as it might lead to a truer knowledge of the state of the system which preceded the commencement of diabetes. In intermitting diabetes, the disease might be seen beginning and ending, and the explanation of the state of the urine which preceded the appearance of the sugar and followed its disappearance must be included in the true theory of diabetes. Moreover, a better knowledge of the antecedent phenomena might enable us to ward off the disease, if not to treat it with more success. The records of seven cases of the intermitting form of the disease were given, and very minute particulars in several, illustrated the amount of sugar present in the urine at stated intervals in the twenty-four hours, as well as the influence of particular forms of diet on the proportion of sugar excreted. In these cases the state of the urine just after the sugar had disappeared was worthy of attention. A remarkable excess of urea was constantly found before and after the sugar disappeared; and although this might be attributed to the animal diet, yet the occurrence of free uric acid and oxalate of lime in the urine pointed most clearly to a state of indigestion which was every day to be found without any sugar appearing in the urine. The author offered the following theoretical contrast between ordinary and saccharine indigestion: Ordinary indigestion showed itself in a want of action on the sugar and starch taken as food, in consequence of which excessive acidity was produced—that is, the changes in the non-nitrogenous food were imperfect. Imperfect changes also occurred in the nitrogenous food; this